

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY

In the Matter of:	*	Enforcement Tracking Nos.
	*	AE-CN-01-0191
Orion Refining Corporation	*	MM-CN-01-0054
		MM-CN-02-0029
St. Charles Parish	*	
		Agency Interest No. 26003
	*	
	*	

SETTLEMENT

WHEREAS, the Secretary of the State of Louisiana Department of Environmental Quality (LDEQ), or his designee, pursuant to the Louisiana Environmental Quality Act, La. R. S. 30:2001, et *seq.*, (LEQA) and the regulations promulgated thereto, is authorized to issue any Order necessary to effectuate the purposes of the LEQA;

WHEREAS, Orion Refining Corporation (Orion) is a Delaware corporation authorized to do business in the State of Louisiana, and, as a corporation, is a person as that term is defined in La. R. S. 30:2004;

WHEREAS, Orion acquired the refinery assets of TransAmerican Refining Corporation on December 15, 1998 and now owns and operates a petroleum refinery located at 15272 River Rd., New Sarpy, St. Charles Parish, Louisiana 70078, (Athe Refinery”);

WHEREAS, Orion, in its operation of the Refinery, is subject to LEQA and the regulations promulgated thereto;

WHEREAS, the LDEQ issued to Orion a Part 70 Air Operating Permit, No. 2520-00027-V0, dated January 10, 2002;

WHEREAS, the LDEQ issued to Orion a construction permit under the Prevention of Significant Deterioration ("PSD") Program, No. PSD-LA-619, dated January 10, 2002, authorizing construction of the Refinery Optimization Project;

WHEREAS, the LDEQ provided to the United States Environmental Protection Agency ("EPA") an opportunity to comment prior to LDEQ's issuance to Orion of the Part 70 and PSD permits referred to above;

WHEREAS, the LDEQ issued a Compliance Order/Notice of Potential Penalty, dated August 8, 2001, Enforcement Tracking No. AE-CN-01-0191, Agency Interest No. 26003;

WHEREAS, the LDEQ issued to Orion a Compliance Order/Notice of Potential Penalty, dated March 19, 2002, Enforcement Tracking No. MM-CN-01-0054, Agency Interest No. 26003;

WHEREAS, the LDEQ issued to Orion a Compliance Order/Notice of Potential Penalty, dated August 29, 2002, Enforcement Tracking No. MM-CN-02-0029 , Agency Interest No. 26003;

WHEREAS, Orion has identified and self-reported certain potential violations of environmental regulations and agreed that settlement of these issues in this Settlement is the most expeditious method to resolve these potential violations;

WHEREAS, in light of this Settlement, Orion has not answered or otherwise responded to any of the above referenced enforcement actions;

WHEREAS, Orion denies and continues to deny that it has violated any law or regulation with respect to its operation of the Refinery;

WHEREAS, Orion has volunteered to enter into negotiations with the LDEQ regarding the above referenced orders and actions as well as other enforcement issues arising under the federal Clean Air Act and the LEQA;

WHEREAS, the LDEQ has participated in a nationwide, broad-based compliance and enforcement initiative with the EPA involving the petroleum refining industry;

WHEREAS, the parties agree that this process is an innovative approach to resolve potential compliance issues while simultaneously advancing the goals of the federal Clean Air Act and LEQA;

WHEREAS, the parties agree that the installation of equipment and implementation of controls pursuant to this Settlement will achieve significant improvements to air quality control and to the environment in general;

WHEREAS, the LDEQ and Orion (collectively designated as the AParties@) agree that this Settlement ("Settlement") is in the public interest and that agreeing to this Settlement without further litigation is the most appropriate means of resolving the LDEQ's enforcement issues;

NOW, THEREFORE, without any admission of fact or law, the Parties hereby agree as follows:

I. Authority to Issue Enter into Settlement

The Secretary of the LDEQ has the authority to enter into this Settlement pursuant to La. R. S. 30: 2001, *et seq.*, including, in pertinent part, La. R.S. 30:2011.D(6), La. R.S. 30: 2025 and La. R.S. 30: 2050.3.

II. Applicability and Binding Effect

This Settlement shall apply to and be binding upon the LDEQ and Orion, its successors and assigns, and its officers, directors, employees in their capacities as such, assignees and delegates.

Orion shall give written notice and a copy of this Settlement to any successors in interest at least thirty (30) days prior to any transfer of ownership of any portion of its refinery property or any assignment of rights concerning, or delegation of duties relating to, any of the operations of its refinery, that occurs during the term of this Order. Orion shall condition any such transfer, in whole or in part, of ownership, operation, or other interest of its refinery upon the successful execution of the terms and conditions of this Order. Orion shall notify the LDEQ in writing at least twenty one (21) days prior to any such transfer. In the event of any such transfer, assignment, or delegation, Orion shall not be released from the obligations or liabilities of this Order unless the LDEQ has approved the release of said obligations or liabilities.

Orion shall provide a copy of this Settlement to each engineering, consulting, contracting or auditing firm to be retained for any work upon execution of any contract relating to such work. Orion shall condition all contracts entered into to perform work upon conformity with the terms of this Settlement. Any action taken by any contractor or consultant retained by Orion to implement Orion's obligations under the Settlement shall be considered an action of Orion for purposes of determining compliance with this Settlement. In any action to enforce this Settlement, Orion shall not assert as a defense any act or failure to act by any of its officers, directors, employees, agent, servants contractors, subcontractors, successors or assigns.

III. Definitions

Unless otherwise expressly provided herein, terms used in this Order shall have the meaning given to those terms in the LEQA, LA. R. S. 2001, *et seq.*, the federal Clean Air Act, 42 U.S.C. 7401, *et seq.*, and the regulations promulgated thereto. In addition, the following definitions shall apply to the terms contained in this Order:

- A. Day or Days: A calendar day or calendar days where the period of time allowed is eleven (11) days or more. "Day" or "Days" shall mean a day other than a Saturday, Sunday, or a State or Federal holiday where the period of time allowed is less than eleven (11) days. When the deadline for submission of a report or other deliverable falls on a Saturday, Sunday or a State or Federal holiday, submission will not be required until the next calendar day that is not a Saturday, Sunday or State or Federal holiday.
- B. Duration (life) of Settlement: The period of time required under the terms of this Settlement for Orion to complete the monetary payment under Part IV, payment of any stipulated penalties under Part VII and the completion of the "BEPs" listed in Part IX, and any other projects required to be performed under this Settlement.
- C. Part: A portion of this Settlement identified by a Roman numeral.
- D. Section: A portion of this Settlement identified by an uppercase Arabic letter.
- E. Paragraph: A portion of this Settlement identified by an Arabic numeral.

IV. Monetary Payment

Orion, without making any admission of liability under state or federal statute or regulation, agrees to pay, and the LDEQ agrees to accept, a cash payment in the amount

of One Million Dollars (\$1,000,000). Payment of the above amount shall be made as follows:

Five Hundred Thousand Dollars (\$500,000) within thirty (30) days of the effective date of this Settlement (“initial payment”);

Two Hundred Fifty Thousand Dollars (\$250,000) within twelve (12) months of the initial payment; and

Two Hundred Fifty Thousand Dollars (\$250,000) within eighteen (18) months of the initial payment.

The claims set forth in this Settlement will be considered satisfied upon payment of the final cash installment and the completion of the Beneficial Environmental Projects (“BEPs”) described in Part IX below and any other projects required to be performed under this Settlement..

V. Program Enhancements Re: Benzene Waste Operations NESHAP ("BWON")

Orion shall undertake the following enhancement to its existing program to minimize or eliminate fugitive benzene waste emissions at its Orion refinery.

A. Current Compliance Status

1. On or before April 5, 2002, Orion reported that it had a Total Annual Benzene (TAB) of less than 10 Mg/yr at its Orion Refinery, in accordance with Subpart FF.

B. Refinery Compliance Option Changes

2. If at any time from the Effective Date of this Settlement through its termination, the Orion Refinery is determined to have a TAB equal to or greater than 10 Mg/yr, Orion shall consult with LDEQ to select a compliance option to be undertaken in accordance with the regulatory provisions of the Benzene Waste Operations NESHAP.

C. Review and Verification of the Refinery's TAB

3. Phase One of the Review and Verification Process.

Orion shall complete a review and verification of the Refinery's TAB, and the Refinery's compliance with the <10 Mg compliance option. Orion's Phase One review and verification process shall include, but not be limited to:

(a) an identification of each waste stream that is required to be included in the Refinery's TAB e.g., slop oil, tank water draws, spent caustic, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes, if these streams meet the definition of a waste under Subpart FF;

(b) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream;

(c) an identification of the benzene concentration in each waste stream, provided, however, that analytical data collected within the last year or documented knowledge of waste streams may be used, 40 CFR § 61.355(c)(2), for streams not sampled; and

(d) an identification of whether or not the stream is controlled consistent with the requirements of Subpart FF.

Orion shall provide the LDEQ at least ten (10) days advance written notice prior to conducting any sampling scheduled under the Phase One Review and Verification process and allow LDEQ personnel the reasonable opportunity to observe any such sampling.

4. By no later than 270 days following the Effective Date of this Settlement, following the completion of Phase One of the review and verification process, Orion shall

submit a Benzene Waste Operations NESHAP Compliance Review and Verification report (“BWON Compliance Review and Verification Report”) that sets forth the results of Phase One, including but not limited to the items identified in (a) through (d) of Paragraph 3.

5. Phase Two of the Review and Verification Process.

Based on the LDEQ’s review of the Phase One BWON Compliance Review and Verification Report(s), no later than sixty (60) days from Orion's submittal of the BWON Compliance Review and Verification Report, the LDEQ may select up to twenty (20) additional waste streams at the Refinery for sampling for benzene concentration. Orion will conduct the required sampling and submit the results to the LDEQ within sixty (60) days of receipt of the LDEQ’s request. To the extent that the LDEQ requires Orion to sample a waste stream as part of the Phase Two review that Orion chose to sample as part of the Phase One review, Orion may average the results of the two sampling events. Orion will use the results of this additional sampling to recalculate the TAB and the uncontrolled benzene quantity. If Phase Two sampling is required by the LDEQ, Orion shall submit an amended BWON Compliance Review and Verification Report no later than one hundred-fifty (150) days after receipt of the LDEQ's request for sampling.

D. Waste/Slop Oil Management

6. No later than 90 days after the Effective Date of this Settlement, Orion, in consultation with the LDEQ will conduct a review of its waste/slop oil management activities at its Orion Refinery. This review is to identify potential sample locations, determine “end of line” benzene sample locations and review available oil movement

transfer documentation to assist Orion with preparation for their sampling as required under Paragraph 28.

E. Implementation of Actions to Correct Non-Compliance

7. If the results of the BWON Compliance Review and Verification Report(s) indicate that the Orion Refinery has a TAB of over 10 Mg/yr, Orion shall submit to LDEQ by no later than one hundred eighty (180) days after completion of the BWON Compliance Review and Verification Report(s), a plan that identifies with specificity the compliance strategy and schedule that Orion will implement to ensure that the Orion Refinery complies with the 2 Mg or 6 BQ compliance options available in Subpart FF as soon as practicable.

8. Review and Approval of Plans Submitted Pursuant to Paragraph 7.

Any plans submitted pursuant to Paragraph 7 shall be subject to the approval of, disapproval of, or modification by the LDEQ. Within sixty (60) days after receiving any notification of disapproval or request for modification from the LDEQ, Orion shall submit to the LDEQ a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, Orion shall implement the plan.

9. Certification of Compliance with the 2 Mg or 6 BQ Compliance Option, as Applicable.

By no later than thirty (30) days after completion of the implementation of all actions, if any, required pursuant to Paragraph 7 to come into compliance with the applicable compliance option, Orion shall submit a report to the LDEQ that the Refinery complies with the Benzene Waste Operations NESHAP. The report shall be certified by a refinery manager or company official responsible for environmental management and

compliance at the refinery covered by the report, using the identical language found in Part X (D).

F. Carbon Canisters

10. If the Orion Refinery is required to install control devices as part of a compliance option under Subpart FF, these devices shall comply with the requirements of Paragraphs 11 - 19 (either primary and secondary canisters in series or single carbon canisters used only as specified in Paragraph 16 of this Part) at all locations at Orion's Refinery where a carbon canister(s) is utilized as a control device under the Benzene Waste Operations NESHAP.

11. Primary and Secondary Carbon Canisters.

By no later than two hundred seventy (270) days after receiving an approved plan issued pursuant to paragraph 8, Orion shall replace all dual canister systems in parallel with primary and secondary carbon canisters and operate them in series.

12. By no later than thirty (30) days following completion of the installation of the dual canisters in series as provided in Paragraph 11, Orion shall submit a report certifying the completion of the installation. The report shall include a list of all locations within the Refinery where secondary carbon canisters were installed and the date that each secondary canister was put into operation.

13. For dual carbon canister systems in series, "breakthrough" between the primary and secondary canister is defined as any reading equal to or greater than 50-ppm volatile organic compounds ("VOC"). At any time during the life of this Settlement, Orion may propose to the LDEQ to conduct a study of the effectiveness of the benzene and VOC limits proposed under this paragraph for dual carbon canisters. The study shall

be designed to determine the concentration of VOC's or benzene that may be emitted from the primary (lead) carbon canister in a dual series before VOC's above background or benzene above 1 ppm is emitted from the secondary (tail) carbon canister. If Orion elects to conduct the study, it must submit written notice to the LDEQ and submit a proposed statement of work and schedule for the study for LDEQ approval.

14. By no later than seven (7) days after start of operation of each secondary carbon canister, Orion shall start to monitor for breakthrough between the primary and secondary carbon canisters at times when there is actual flow to the carbon canister, in accordance with the frequency specified in 40 CFR § 61.354(d).

15. Orion shall replace the original primary carbon canisters with either a fresh carbon canister or the secondary canister immediately when breakthrough is detected. If the original secondary carbon canister is used as the new primary carbon canister, a fresh carbon canister will become the secondary canister. For purposes of this Paragraph, "immediately" shall mean within twenty-four (24) hours.

16. Utilizing single carbon canisters. Orion shall continue to operate its existing single canisters for short-term operations such as with temporary storage tanks. For all canisters operated as part of a single canister system, "breakthrough" is defined for the purposes of this Settlement as any reading of VOC above background. Beginning no later than the date of receipt of an approved plan issued pursuant to paragraph 8, Orion shall monitor for breakthrough from a single carbon canister at times when there is actual flow to the carbon canister, in accordance with the frequency specified in 40 CFR § 61.354(d).

17. For locations where single canisters are utilized, canisters will be replaced when breakthrough is determined within eight (8) hours for canisters with historical replacement intervals of two weeks or less or within twenty-four (24) hours of breakthrough for canisters with a historical replacement interval of more than two weeks. Single carbon canisters can be replaced with a dual system (in series) at any time, provided that Orion provides notice to the LDEQ and single canister monitoring is continued until the second canister is installed.

18. Orion shall maintain a supply of fresh carbon canisters used as single canisters at the Refinery at all times. Orion shall either maintain the supply or assure a replacement is available within the replacement interval for all canisters used in dual systems.

19. Records for the requirements of Paragraphs 10 through 18 shall be maintained in accordance with 40 CFR § 61.356(j)(10).

G. Annual Review

20. Orion shall establish a process to annually review both process and project information for the Refinery, including but not limited to construction projects, to ensure that all new benzene waste streams are included in each Refinery's waste stream inventory during the life of this Settlement. Orion shall have one hundred eighty (180) days from Effective Date of this Settlement to modify existing management of change procedures for this annual review or to develop a new program.

H. Laboratory Audits

21. Orion shall conduct audits of all laboratories that perform analyses of Orion's benzene waste operations NESHAP samples to ensure that proper analytical and quality

assurance/quality control procedures are followed. These audits may be conducted either by Orion personnel or third parties.

22. Beginning within one hundred eighty (180) days after the Effective Date of the Settlement, Orion shall conduct initial audits of the laboratories used by its Refinery. In addition, Orion shall audit any new laboratory used for analyses of benzene samples prior to use of the new laboratory.

23. During the life of this Settlement, Orion shall conduct subsequent laboratory audits, such that each laboratory is audited every two (2) years.

I. Spills

24. Upon entry of this Settlement, Orion shall review reportable spills within the Refinery to determine if benzene waste, as defined under Subpart FF, was generated. For the purposes of this review, ‘reportable’ benzene quantity will be ten (10) pounds. Orion shall account for such benzene waste in the respective TAB as required by 40 CFR § 61.342. If the Refinery’s TAB is greater than or equal to 10 Mg/year, Orion will account for such benzene wastes in accordance with the applicable compliance option calculations, as appropriate under Subpart FF, unless the benzene waste is promptly managed in controlled waste management units.

J. Training

25. By no later than one hundred twenty (120) days from the Effective Date of this Settlement, Orion shall develop and begin implementation of annual (i.e., once each calendar year) training for all employees who may be required to draw benzene waste samples.

26. The Orion refinery shall, by no later than one hundred eighty (180) days from the date of receipt of an approved plan issued pursuant to Paragraph 8, complete the development of standard operating procedures for all control equipment used to comply with the Benzene Waste Operations NESHAP. By no later than two hundred seventy (270) days thereafter, Orion shall complete an initial training program regarding these procedures for all operators assigned to this equipment. Comparable training shall also be provided to any persons who subsequently become operators, prior to their assumption of this duty. Until termination of this Settlement, “refresher” training in these procedures shall be performed at a minimum on a three (3) year cycle.

27. If personnel are employees of contractors, the contractor will provide their employees' training information to Orion.

K. Sampling Plans

28. Orion shall submit a sampling plan for the Refinery to the LDEQ for approval. The plan will :

- (a) Identify the annual sampling of all waste streams that contributed 0.05 Mg/yr or more to the previous year's TAB calculation; and
- (b) Identify sampling to conduct quarterly “end of the line” benzene determination. This will include proposed sampling locations and methods for flow calculations to be used in the quarterly benzene determination.

If the LDEQ requests no Phase Two samples, the plans shall be submitted no later than one year from the Effective Date of this Settlement. If the LDEQ requests Phase Two samples, the plan shall be submitted no later than two hundred ten (210) days after the LDEQ's request. The sampling plan shall be implemented during the first full

calendar quarter after Orion receives written approval from the LDEQ of the sampling plans required by this Paragraph. After two (2) years, Orion may request an alternative sampling plan for its Refinery, including sampling frequency, and the LDEQ should not unreasonably withhold its consent.

L. Quarterly Estimation of Annual TAB

29. Orion shall use all sampling results and approved flow calculation methods under the approved sampling plans (Paragraph 28) to calculate a quarterly and estimate a calendar year value for the refinery. If the quarterly calculation for the refinery made pursuant to this Paragraph exceeds 2.5 Mg for the refinery, then Orion shall prepare a written summary and schedule of the activities planned to minimize benzene wastes at the facility for the rest of the calendar year to ensure that the calendar year calculation complies with the 10 Mg TAB calculation. The summary and schedule are due no later than sixty (60) days after the close of the quarter in which the quarterly calculation exceeded the applicable quantity.

30. If any estimated calendar year calculation for any facility made pursuant to the preceding Paragraph 29 exceeds 10 Mg for the refinery, then Orion shall prepare for the refinery a written summary and schedule of the activities planned to minimize benzene wastes at such facility to ensure that the calendar year calculation complies with the Benzene Waste Operations NESHAP compliance option. (The projected annual estimates themselves are not the basis for penalties and are not deemed to be instances of non-compliance for purpose of this Settlement.) The summary and schedule are due no later than sixty (60) days after the close of the quarter in which the estimated annual amount exceeded the applicable quantity.

M. Miscellaneous Measures

31. The provisions of this Paragraph shall apply to the Orion Refinery, if its TAB exceeds 10 Mg/yr, from such time as a compliance strategy is completed, through termination of this Settlement. Orion shall:

(a) Conduct monthly visual inspections of all water traps used for BWON control within the Refineries' individual drain systems;

(b) Identify and mark all area drains that are segregated stormwater drains;

(c) Where installed, visually inspect all conservation vents or indicators on process sewers for detectable leaks on a weekly basis; reset any vents where leaks are detected; and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, Orion may submit a request to the LDEQ to modify the frequency of the inspections. Nothing in this Paragraph 31(c) shall require Orion to monitor conservation vents on fixed roof tanks.

(d) On a quarterly basis, conduct monitoring of the controlled oil-water separators in benzene service in accordance with the "no detectable emissions" provision in 40 CFR § 61.347.

N. Closed Loop Sampling

32. Within one (1) year after the Effective Date of this Settlement, the refinery will review the closed purge sampling devices on sampling points on waste and process streams consistent with safety, feasibility, and cost, and with the requirements of 40 CFR, Part 63, Subpart CC and report such findings to the LDEQ. Orion believes that a project or investigation involving these closed loop systems will have little effect on benzene emissions. The systems will be compared to the Refinery MACT standard. Any

applicable regulatory deficiencies will be corrected within two (2) years of the Effective Date of this Settlement, unless a refinery process unit shutdown is required, in which case the deficiency shall be corrected during the next scheduled process unit shutdown.

O. Record keeping and Reporting Requirements for this Part

33. In addition to the reports required under 40 CFR § 61.357 and at the times specified in the applicable provisions and Paragraphs of this Part, Orion shall make available, as and to the extent required, the following reports to the LDEQ:

(a) BWON Compliance Review and Verification Report(s) (Paragraph 4), as amended, if necessary (Paragraph 5);

(b) Amended TAB Report(s), if necessary (Paragraph 7);

(c) Plan for Orion to come into compliance with a 2 Mg or 6 BQ compliance option upon discovering that its TAB exceeds 10 Mg/yr through the BWON Compliance Review and Verification Report(s) (Paragraph 7);

(d) Compliance certification, if necessary (Paragraph 9);

(e) Report certifying the completion of the installation of dual carbon canisters in series (Paragraph 12);

(f) Sampling Plans (Paragraphs 28 and 29);

(g) Report on installation of closed purge sampling devices (Paragraph 33); and

(h) Written summary and schedule to ensure that uncontrolled benzene does not equal or exceed, as applicable, 10 Mg/yr – or is minimized – based on quarterly or projected calendar year uncontrolled benzene quantities as determined through EOL sampling (Paragraphs 30 and 31).

34. Quarterly Reports.

Orion shall submit the following information quarterly. This provision is applicable for the term of this Settlement, unless the reporting for (a), (b) or (c) below is modified as provided in Paragraph 35:

(a) Sampling results and approved flow calculations generated pursuant to Section L.

(b) Estimated quarterly and annual TABs calculated and reported pursuant to Section L.

(c) Initial and/or subsequent training conducted in accordance with Paragraphs 25 - 27 through the end of calendar quarter for which the quarterly report is due.

(d) Initial and subsequent laboratory audits conducted pursuant to Paragraphs 21 - 23 through the end of calendar quarter for which the quarterly report is due. Orion shall include, at a minimum, the identification of each laboratory audited, a description of the methods used in the audit, and the results of the audit.

35. Any time after two (2) years of quarterly reporting pursuant to Paragraph 34(a), (b), or (c) of sampling results and estimated calendar calculations, Orion may submit a request to the LDEQ on any or all of these items to modify the frequency of reporting. This request would include the provision to report for the previous calendar year in the quarterly report due for the last calendar quarter of each year submitted pursuant to the provisions of this Settlement. This request for Paragraphs 34(a) and (b) would include a provision to recommence quarterly reporting for any calendar year in which the estimated calendar calculation for the facility indicates it may exceed the annual compliance option.

36. Reserved

37. Orion shall submit all reports, plans and certifications to the LDEQ. Upon agreement of the Parties, Orion may submit the materials electronically.

VI. Program Enhancements re: Leak Detection and Repair (LDAR)

Program Summary:

In order to minimize or eliminate fugitive emissions of volatile organic compounds (VOCs), volatile hazardous air pollutants (VHAPs), and organic hazardous air pollutants (HAPs) from equipment in light liquid and/or in gas/vapor service, Orion shall undertake at its refinery the enhancements in Paragraph 1 through Paragraph 28 of this Part to the refinery's LDAR program as may be required under Title 40 of the Code of Federal Regulations, Part 60, Subparts GGG and VV; Part 61, Subparts J and V; Part 63, Subparts F, H, and CC; and applicable state LDAR requirements. The terms "equipment," "in light liquid service" and "in gas/vapor service" shall have the definitions set forth in the applicable provisions of Title 40 of the Code of Federal Regulations, Part 60, Subparts GGG and VV; Part 61, Subparts J and V; Part 63, Subparts F, H and CC; and applicable state LDAR regulations.

A. Written Refinery-Wide LDAR Program

1. By no later than one hundred eighty (180) days after the Effective Date of this Settlement, Orion shall develop and maintain, for its refinery, a written program for compliance with all applicable federal and state LDAR regulations. This written program may be specific to the Refinery and will include all process units subject to federal and/or state LDAR regulations ("Refinery-wide program"). Until termination of this Settlement, Orion shall implement this program on a Refinery-wide basis, and Orion shall update the

refinery's program as necessary to ensure continuing compliance. The Refinery-wide program shall include:

(a) An overall, Refinery-wide leak rate goal that will be a target for achievement on a process-unit- by-process-unit basis;

(b) An identification of all equipment in light liquid and/or in gas/vapor service that has the potential to leak VOCs, HAPs, and VHAPs, within process units that are owned and maintained by the refinery;

(c) Procedures for identifying leaking equipment within process units that are owned and maintained by the refinery;

(d) Procedures for repairing and keeping track of leaking equipment;

(e) A process for evaluating new and replacement equipment to promote consideration and installation of equipment that will minimize leaks and/or eliminate chronic leakers;

(f) A definition of "LDAR Personnel" and process for accountability, and identify for the refinery the person or position that will be the "LDAR coordinator." This person shall have the authority and responsibility to implement improvements to the LDAR program; and

(g) Procedures (e.g., a Management of Change program) to ensure that components subject to LDAR requirements added to the refinery during maintenance and construction are integrated into the LDAR program.

B. Training

2. By no later than one (1) year from the Effective Date of this Settlement, Orion shall implement the following training programs at the Refinery:

(a) For Orion employees newly-assigned to LDAR responsibilities, Orion shall require LDAR training prior to each employee beginning such work;

(b) For all Orion employees assigned LDAR responsibilities, such as monitoring technicians, database users, QA/QC personnel and the LDAR Coordinator, Orion shall provide and require completion of annual LDAR refresher training;

(c) For all other Orion employee operations and maintenance personnel, such as operators and mechanics performing valve packing and designated unit supervisor reviewing for delay of repair work, Orion shall provide and require completion of an initial training program that includes instruction on aspects of LDAR that are relevant to the person's duties. Until termination of this Settlement, "refresher" training in LDAR for these personnel shall be performed at a minimum on a three- (3) year cycle; and

(d) If contract employees are performing LDAR work, Orion's contractor will provide its training information and records to Orion.

C. LDAR Audits

3. Orion shall implement at its refinery, Refinery-wide audits performed as set forth in Paragraphs 3 and 4, to ensure the refinery's compliance with all applicable LDAR requirements. Orion's LDAR audits shall include but not be limited to, comparative monitoring, records review, tagging, data management, and observation of the LDAR technicians' calibration and monitoring techniques.

4. Third-Party Audits. Orion shall retain a contractor(s) to perform a third-party audit of the refinery's LDAR program. The first third-party audit for the Orion Refinery shall be completed no later than one (1) year from the Effective Date of this Settlement.

Thereafter, Orion shall conduct third-party audits within at least three (3) years of the previous audit for the term of this Settlement.

5. Reserved.

6. Reserved.

D. Actions Necessary to Correct Non-Compliance

7. If the results of any of the audits conducted pursuant to Paragraphs 3 - 4 at Orion's Refinery identify any areas of non-compliance, Orion shall implement, as soon as practicable, all steps necessary to correct the area(s) of non-compliance, and to prevent, to the extent practicable, a recurrence of the cause of the non-compliance. Until two (2) years after termination of this Settlement, Orion shall retain the audit reports generated pursuant to Paragraphs 4 and shall maintain a written record of the corrective actions that Orion takes at its refinery in response to any deficiencies identified in any audits.

8. In the quarterly report submitted pursuant to the provisions of Paragraph 30 for the first calendar quarter of each year, Orion shall report on the audits and corrective actions for audits performed during the previous year as provided in Paragraph 30(b).

E. Internal Leak Definition for Valves and Pumps

9. Orion shall utilize the internal leak definitions listed in Paragraphs 10 and 11 for valves and pumps in light liquid and/or gas/vapor service, unless other permit(s), regulations, or laws require the use of lower leak definitions.

10. Leak Definition for Valves. By no later than two (2) years after the Effective Date, Orion shall utilize an internal leak definition of 500 ppm VOCs for its refinery's valves in light liquid and/or gas vapor service, excluding pressure relief devices.

11. Leak Definition for Pumps. By no later than two (2) years from the Effective Date of this Settlement, Orion shall utilize an internal leak definition of 2,000 ppm for its Refineries' pumps in light liquid and/or gas/vapor service.

F. Reporting, Recording, Tracking, Repairing and Remonitoring Leaks of Valves and Pumps Based on the Internal Leak Definitions

12. Reporting.

For regulatory reporting purposes, Orion may continue to report leak rates in valves and pumps against the applicable regulatory leak definition, or may use the lower, internal leak definitions specified in Paragraphs 10 and 11. Orion will identify in the report which definition is being used.

13. Recording, Tracking, Repairing and Re-monitoring Leaks.

Orion shall record, track, repair and re-monitor applicable leaks in excess of the internal leak definitions of Paragraphs 10 and 11 (at such time as those definitions become applicable), except that Orion shall have thirty (30) days to make repairs and re-monitor leaks that are greater than the internal leak definitions but less than the applicable regulatory leak definitions.

G. "First Attempt at Repairs" on Valves

14. Orion shall implement "first attempt at repair" beginning no later than ninety (90) days after the Effective Date of this Settlement. Orion shall promptly make a "first attempt at repair" on any valve that has a reading greater than 200 ppm of VOCs excluding control valves, pumps, and components that LDAR personnel are not authorized to repair. The timing for the "first attempt at repair" of those components that the monitoring personnel are not authorized to repair will be consistent with the existing

regulatory requirements. “First attempt at repair” will be made promptly (no later than the next business day) for the valves over 200 ppm that the LDAR monitoring personnel are authorized to attempt repair. The “first attempt at repair” will be re-monitored no later than the next regular business day at that refinery to assure the leak is not worse. No other action will be required unless the leak exceeds the then-applicable leak definition for the refinery. If, after two (2) years, Orion can demonstrate with sufficient monitoring data that the “first attempt at repair” at 200 ppm will worsen or not improve the Refinery’s leak rates, Orion may request that the LDEQ reconsider or amend this requirement.

H. LDAR Monitoring Frequency

15. Pumps.

When the lower leak definition for pumps becomes applicable pursuant to Paragraph 11, Orion shall monitor pumps in light liquid and/or gas vapor service at the lower leak definition on a monthly basis.

16. Valves.

Unless more frequent monitoring is required by a State regulation, when the lower internal leak definition for valves becomes applicable pursuant to Paragraph 10, Orion shall implement a program to monitor valves in light liquid and/or gas vapor service (other than difficult to monitor or unsafe to monitor valves) on a quarterly basis, with no ability to skip periods.

I. Electronic Monitoring, Storing, and Reporting of LDAR Data

17. Electronic Storing and Reporting of LDAR Data.

At its refinery, Orion has and will continue to maintain for the duration of this Settlement an electronic database for storing and reporting LDAR data.

18. Electronic Data Collection During LDAR Monitoring.

For the duration of this Settlement, Orion shall continue to use dataloggers and/or electronic data collection devices during all LDAR monitoring. Orion or its designated contractor shall use its/their best efforts to transfer, on a daily basis, electronic data from electronic datalogging devices to the electronic database of Paragraph 17. For all monitoring events in which an electronic data collection device is used, the collected monitoring data shall include a time and date stamp, an operator identification, and an instrument identification. Orion may use paper logs where necessary or more feasible (e.g., small rounds, re-monitoring, or when dataloggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, and the identification of the monitoring equipment. Orion shall transfer any manually recorded monitoring data to the electronic database of Paragraph 17 within seven (7) days of monitoring.

J. QA/QC of LDAR Data

19. By no later than one hundred twenty (120) days after the Effective Date of this Settlement, Orion or a third party contractor retained by Orion shall develop and implement a procedure to ensure a quality assurance/quality control (“QA/QC”) review of all data generated by LDAR monitoring technicians. This QA/QC procedure shall include procedures for:

(a) contractor(s) reviewing the monitoring data provided to Orion before submitting the data to Orion;

(b) quarterly performing QA/QC of Orion's and any contractor's monitoring data which shall include, but not be limited to: number of components monitored per technician, time between monitoring events, and abnormal data patterns; and

(c) periodically reviewing the daily monitoring reports.

(d) Establishing a tracking program for maintenance and construction records to ensure that valves and pumps are integrated into the LDAR program after maintenance and construction activities.

K. Calibration/Calibration Drift Assessment

20. Calibration.

Orion shall conduct all calibrations of LDAR monitoring equipment using methane as the calibration gas, in accordance with 40 CFR Part 60, EPA Reference Test Method 21.

21. Calibration Drift Assessment.

Beginning no later than the Effective Date of this Settlement, Orion shall conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift, at a minimum. Orion shall conduct the calibration drift assessment using, at a minimum, an approximately 500 ppm calibration gas. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, Orion shall re-monitor all valves that were monitored since the last calibration that had a reading greater than 100 ppm and shall re-monitor all pumps that were monitored since the last calibration that had a reading greater than 500 ppm.

L. Delay of Repair

22. Within thirty (30) days of the completion of the written program described in Paragraph 1, for any equipment for which Orion is allowed, under 40 CFR § 60.482-9(a) or the *MACT Determination for Refinery Equipment Leaks, July 26, 1994*, to place on the “delay of repair” list for repair, Orion shall:

(a) Require sign-off by the unit supervisor, which position shall be identified in the written program, that the piece of equipment is technically infeasible to repair without a process unit shutdown, before the component is eligible for inclusion on the “delay of repair” list; and

(b) Include equipment that is placed on the “delay of repair” list in Orion’s regular LDAR monitoring. For leaks above the internal leak definition rate and below the regulatory rate, Orion shall have thirty (30) days to put the equipment on the delay of repair list.

23. For valves, other than control valves or pressure relief valves, that qualify to be on the “delay of repair” list and are leaking at a rate of 50,000 ppm or greater, Orion will undertake “extraordinary efforts” to fix the leaking valve rather than keeping the valve on the “delay of repair” list, unless Orion can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner. For valves, extraordinary efforts for repairs shall be defined as non-routine repair methods. The extraordinary effort will be undertaken within one hundred twenty (120) days of the valve being placed on the "delay of repair" list. After two (2) unsuccessful attempts to repair a leaking valve through extraordinary efforts, Orion may keep the leaking valve on its “delay of repair” list. Orion will implement these extraordinary repair procedures within thirty (30) days of completion of the written program.

24. Within one hundred twenty (120) days of implementation of the written program, Orion shall also make extraordinary efforts to repair those valves that have been placed on the delay of repair list which leak at 10,000 ppm for more than three (3) years. Orion may delay these repairs further if it can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner.

M. Record keeping and Reporting Requirements for this Paragraph

25. Written Refinery-Wide LDAR Program.

No later than thirty (30) days after completion of the development of the written refinery-wide LDAR programs that Orion develops pursuant to Paragraph 1, Orion shall submit a copy of the refinery's Program to the LDEQ.

26. Orion shall include the following information, at the following times, in its quarterly progress reports:

a. First Quarterly Progress Report Due under the Settlement.

At the later of: (i) the first quarterly progress report due under this Settlement; or (ii) the first quarterly progress report after the requirement becomes due, Orion shall include the following:

- (1) A certification of the implementation of the "first attempt at repair" program of Paragraph 14;
- (2) A certification of the implementation of QA/QC procedures for review of data generated by LDAR technicians as required by Paragraph 19;
- (3) An identification of the position at the refinery responsible for LDAR performance as defined in the written program required in Paragraph 1;

- (4) A certification of the development of a tracking program for new valves and pumps added during maintenance and construction defined in the written program required in Paragraph 1;
- (5) A certification of the implementation of the calibration drift assessment procedures of Paragraph 20; and
- (6) A certification of the implementation of the “delay of repair” procedures of Paragraphs 22 through 24.

b. Quarterly Progress Report for the First Calendar Quarter of Each Year - Reporting on Audits.

Orion will report on the audits and corrective actions (Paragraphs 3 - 8) in the quarterly progress report that Orion submits for the first calendar quarter of each year. For the first third-party audit at the refinery, Orion shall include a copy of each audit report from audits conducted in the previous calendar year and a summary of the actions taken or planned to correct all deficiencies identified in the audits. For the remainder of the audits required pursuant to this Order, in the quarterly progress report that Orion submits for the first calendar quarter of each year, Orion shall identify the auditors, and identify that a written plan exists identifying corrective action for any deficiencies identified in the audits and that this plan is being implemented. The certification for that quarterly report as provided in Paragraph 1 will serve as the certification for the audit information.

c. In Each Report due under LAC 33:III.Chapter 51 - Louisiana MACT Determination for Refinery Equipment - July 26, 1994.

(1) Training. Information identifying the measures that Orion took to comply with the provisions of Paragraph 2; and

(2) Monitoring. The following information on LDAR monitoring:

(a) a list of the process units monitored during the quarter;

(b) the number of valves and pumps monitored in each process unit;

(c) the number of valves and pumps found leaking;

(d) the number of “difficult to monitor” pieces of equipment monitored;

(e) the projected month of the next monitoring event for that unit; and

(f) a list of all equipment currently on the “delay of repair” list and the date each component was placed on the list.

27. Reserved

28. The LDEQ to Receive Reports, Plans and Certifications Required in this Part: Number of Copies.

Orion shall submit all reports, plans and certifications required to be submitted under Paragraphs 21 - 22 in duplicate to the LDEQ. Upon written agreement of the parties, Orion may submit the materials electronically. Certifications shall be made in accordance with the provisions in Part X of this Settlement.

VII. Program Enhancements re: Flaring

Program Summary: Pursuant to the schedule included in this Settlement, Orion agrees to take the following measures with respect to its SRPs and flaring devices at its refinery. Orion shall eliminate all reasonably preventable SO₂ emissions from flaring. Orion will implement procedures for root cause analysis of acid gas flaring events at its refinery.

A. Definitions

1. Unless otherwise expressly provided herein, terms used in this Part shall have the meaning given to those terms in the Clean Air Act, 42 U.S.C. §§ 7401 et. seq., and the regulations promulgated hereunder, and the LEQA and regulations promulgated there under. In addition, the following definitions shall apply to the terms contained within this Part of this Settlement:

(a) “Acid Gas” shall mean any gas that contains hydrogen sulfide and is generated at a refinery by the regeneration of an amine scrubber solution.

(b) “Acid Gas Flaring” shall mean, for purposes of this Settlement, the combustion of Acid Gas and/or Sour Water Stripper Gas in a Flaring Device. Nothing in this definition shall be construed to modify, limit, or affect LDEQ’s authority to regulate the flaring of gases that do not fall within the definitions contained in this Settlement of Acid Gas or Sour Water Stripper Gas.

(c) “Acid Gas Flaring Device” shall mean any device that receives and combusts Acid Gas and/or Sour Water Stripper Gas, except facilities in which gases are combusted to produce elemental sulfur, sulfuric acid, ammonium thiosulfate, ammonium bisulfite or sodium bisulfite.

(d) “Acid Gas Flaring Incident” (or “AG Flaring Incident”) shall mean the continuous or intermittent flaring/combustion of Acid Gas and/or Sour Water Stripper Gas that results in the emission of sulfur dioxide (SO₂) equal to or greater than five-hundred (500) pounds in a twenty-four (24) hour period; provided, however, that if five-hundred (500) pounds or more of sulfur dioxide have been emitted in a twenty-four (24) hour period and Flaring continues into subsequent, contiguous, non-overlapping twenty-

four (24) hour period(s), each period of which results in emissions equal to, or in excess of five hundred (500) pounds of sulfur dioxide, then only one Acid Gas Flaring Incident shall have occurred. Subsequent, contiguous, non-overlapping periods are measured from the initial commencement of Flaring within the Acid Gas Flaring Incident.

(e) “Day” shall mean a calendar day.

(f) “First Time Occurrence of a Root Cause” shall mean that the root cause of the Flaring Incident as identified pursuant to the procedures outlined in Paragraph 12(d) is one for which the root cause is not a recurrence of the same root cause of a previous Flaring Incident that has occurred since the Effective Date of this Settlement.

(g) “Hydrocarbon Flaring” or “HC Flaring” shall mean, for purposes of this Settlement, the combustion of refinery process gases, except for Acid Gas and/or Sour Water Stripper Gas and/or Tail Gas, in a Hydrocarbon Flaring Device. Nothing in this definition shall be construed to modify, limit, or affect the LDEQ’s authority to regulate the flaring of gases that do not fall within the definitions contained in this Settlement.

(h) “Hydrocarbon Flaring Device” (or a “flare”) shall mean a combustion device used to safely control any excess volume of a refinery process gas as follows: Orion’s Refinery Flares #1 and #2.

(i) “Hydrocarbon Flaring Incident” (or “HC Flaring Incident”) shall mean the continuous or intermittent flaring of refinery process gases, except for Acid Gas or Sour Water Stripper Gas or Tail Gas, at a Hydrocarbon Flaring Device that results in the emissions of sulfur dioxide (SO₂) that are equal to or greater than five hundred (500) pounds above existing permit limits in a twenty-four (24) hour period.

(j) “Malfunction” shall mean any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(k) “Root Cause” shall mean the primary cause of an Acid Gas Incident, Tail Gas Incident, or Hydrocarbon Flaring Incident as determined through a process of investigation; provided, however, that if the subject incident encompasses multiple releases of sulfur dioxide, the “Root Cause” may encompass multiple primary causes.

(l) “Scheduled Maintenance” shall mean any maintenance performed during a shutdown of a unit that Orion schedules at least ten (10) days in advance of the shutdown.

(m) “Shutdown” shall mean the cessation of operation of an affected facility for any purpose.

(n) “Sour Water Stripper Gas” or “SWS Gas” shall mean the gas produced by the process of stripping or scrubbing refinery sour water.

(o) “Startup” shall mean the setting in operation of an affected facility for any purpose.

(p) “Sulfur Recovery Plant” or “SRP” shall mean the devices operated or permitted by Orion identified as: the 1600 SRU and the 3700 SRU.

(q) “Tail Gas” (TG) shall mean exhaust gas from the Claus trains and the tail gas unit (“TGU”) section of the SRP.

(r) “Tail Gas Incident” (or “TG Incident”) shall mean, for the purpose of this Settlement, combustion of Tail Gas that either: (i) is combusted in a flare and results in

500 pounds of sulfur dioxide emissions in a twenty-four (24) hour period; or (ii) is combusted in a monitored incinerator and the amount of sulfur dioxide emissions in excess of the 250 ppm limit (as defined by 40 CFR 60.104 (a)(2)(i)) on a twenty-four (24) hour average exceeds 500 pounds.

(s) “Upstream Process Units” shall mean all amine contactors, amine scrubbers, and sour water strippers at the refinery, as well as all process units at the refinery that produce gaseous or aqueous waste streams that are processed at amine contactors, amine scrubbers, or sour water strippers.

B. Flare Applicability

2. Orion acknowledges that its two (2) flares are subject to NSPS Subparts A and J. The Refinery's Part 70 Air Operating Permit established federally enforceable permit limits on the flares, based in part upon modeling completed as part of the permit application process.

a. By no later than one (1) year after the Effective Date, Orion will review the Subpart A and J compliance status of its two (2) flares. If compliance is confirmed, Orion will notify the LDEQ of this finding within thirty (30) days of completion of the review. Orion shall include a certification of compliance for the release of liability for the flares for NSPS Subpart A and J under Part XII (Effect of Settlement).

b. Orion shall meet the NSPS Subpart A and J requirements for its flares using one of the following methods:

(1) Implementing good air pollution control practices as required by 40 CFR 60.11(d) and following the procedures set forth in Subpart H of this Part;

(2) Operating the flares as a fuel gas combustion device and monitoring H₂S in accordance with 40 CFR 60.104(a) (1); or

(3) Operating the flares such that it only receives process upset gas, fuel gas that is released to the flares as a result of relief valve leakage or other emergency malfunctions (as defined by NSPS Subpart J).

c. In the event the review required in subsection (a) above indicates the flares do not comply with NSPS Subparts A and J, then Orion shall implement the compliance option listed in subsection (b) above the earlier of: (i) the first turnaround for the flares that occurs at least six (6) months after the completion of the flare evaluation; or (ii) the end of 2008.

d. If subsection (c) is applicable, Orion shall submit notification to LDEQ when it has achieved compliance with Subpart A and J. Such notification shall be submitted within thirty (30) days of completion of the compliance option. Orion shall include a certification of compliance for the release of liability for the flares for NSPS Subpart A and J under Part XII (Effect of Settlement).

e. Upon bringing a flare into compliance or upon confirming compliance, Orion shall conduct a flare performance test pursuant to 40 CFR 60.8 and 60.18. In lieu of conducting the velocity test required in 40 CFR 60.18, Orion may submit velocity calculations which demonstrate that the flare meets the performance specification required by 40 CFR 60.18.

f. To the extent that Orion chooses an alternative monitoring method to demonstrate compliance with emissions limits under 40 CFR 60.104, Orion may begin using the method immediately upon submitting the application for approval of use,

provided the method is the same or substantially similar to the method identified as the "Alternative Monitoring Plan for NSPS Subpart J Refinery Fuel Gas" attached to EPA's December 2, 1999, letter to Koch Refining Company, LP.

C. SRP NSPS Subparts A and J Applicability

3. The Orion operated and permitted SRPs are subject to and shall continue to comply with the applicable provisions of NSPS Subparts A and J.

4. Immediately upon the Effective Date of this Settlement, Orion agrees that all emission points (stacks) to the atmosphere for tail gas emissions from each of Orion's operated and permitted SRPs will continue to be monitored and reported upon as required by 40 CFR §§ 60.7(c), 60.13, and 60.105. This requirement is not applicable to Acid Gas Flaring Devices.

5. Sulfur pit emissions to the atmosphere shall continue to be included and monitored as part of the SRP's emissions.

6. Reserved

7. During the life of this Settlement, for the purpose of determining compliance with the SRP emission limits, Orion shall apply the "start-up/shutdown" provisions set forth in NSPS Subpart A to the Claus Sulfur Recovery Plant and not to the independent start-up or shut-down of its corresponding control device(s) (e.g. TGU). However, the malfunction exemption set forth in NSPS Subpart A shall apply to both the Claus Sulfur Recovery Plant and its control device(s) (e.g., TGU).

D. Sulfur Recovery Plant Optimization

8. Orion has completed an SRP optimization study and agrees to submit a copy of the report of that study within thirty (30) days of the Effective Date of this Settlement.

The LDEQ will review Orion's report and provide Orion with any comments relative to the completeness of Orion's study within sixty (60) days of its receipt. If the LDEQ concludes that Orion should conduct a follow up or supplemental SRP optimization study, the LDEQ shall notify Orion and Orion shall be required to conduct a follow up or supplemental SRP optimization study consistent with the LDEQ's comments and findings within eighteen (18) months of notification by the LDEQ. The LDEQ directive to Orion is subject to the Dispute Resolutions provision of this Settlement. A SRP optimization study, if required to be implemented under this Part, shall include the following requirements:

- (a) A review of operator and engineer training for SRP and amine treating operations;
- (b) operating parameters, material balances and efficiencies;
- (c) acid gas and SWS gas composition;
- (d) operating problems and corrective actions;
- (e) incremental improvements achieved;
- (f) new or modified operating procedures; and
- (g) root cause and corrective action performed as a result of any incident investigation performed as a result of an Acid Gas Flaring Incident or Tail Gas Flaring Incident.

If the LDEQ determines that the SRP optimization study that Orion previously performed is adequate, Orion shall continue to implement the recommendations of the study for the life of this Settlement. To the extent Orion disagrees with any of the recommendations and/or does not plan to implement a recommendation, it will identify

each such recommendation and notify the LDEQ in writing why each such recommendation is not being implemented. To the extent the LDEQ disagrees, it shall so notify Orion, in which case Orion shall either implement the recommendation at issue or invoke the Dispute Resolution provisions of this Settlement.

E. Past Flaring

9. Orion supplied the LDEQ and EPA with a list of air releases that occurred from December 15, 1998 through March 11, 2001. Orion has implemented (or is in the process of implementing) corrective actions to minimize the number and duration of acid gas flaring events. Within thirty (30) days of the Effective Date, Orion will submit to the LDEQ a list of corrective actions which had been initiated but had not been completed as of the Effective Date.

F. Future Flaring

10. By no later than the Effective Date of this Settlement, Orion shall implement procedures at the refinery for evaluating whether future Acid Gas Flaring Incidents and Tail Gas Incidents are due to Malfunctions. The procedures require Root Cause Failure Analysis ("RCFA") and Corrective Action for flaring incidents as specified in this Settlement, and stipulated penalties for Acid Gas Flaring Incidents or Tail Gas Incidents if the Root Causes were not due to Malfunctions.

11. By no later than the Effective Date of this Settlement, Orion shall implement procedures at the refinery for evaluating whether future HC Flaring Incidents are due to Malfunctions. The procedures require RCFA and Corrective Action for HC Flaring Incidents as specified in this Settlement.

G. Tail Gas Incidents

12. For Tail Gas Incidents, Orion shall follow the investigative, reporting, and corrective action as outlined in Paragraph 13 and the same assessment of stipulated penalty procedures for Acid Gas Flaring outlined in Paragraph 20. Such Tail Gas Incidents would not be counted in the tally of Acid Gas Flaring Incidents under Paragraph 21

H. Requirements Related to All Flaring Incidents

13. Investigation and Reporting. No later than forty-five (45) days following the end of an Acid Gas Flaring Incident, Tail Gas Incident or a HC Flaring Incident (individually and collectively referred to as “Flaring Incident”), Orion shall submit a report to the LDEQ that sets forth the following:

(a) The date and time that the Flaring Incident started and ended. To the extent that the Flaring Incident involved multiple releases either within a twenty-four (24) hour period or within subsequent, contiguous, non-overlapping twenty-four (24) hour periods, Orion shall set forth the starting and ending dates and times of each release;

(b) An estimate of the quantity of SO₂ that was emitted and the calculations that were used to determine that quantity;

(c) The steps, if any, that Orion took to limit the duration and/or quantity of SO₂ emissions associated with the Flaring Incident;

(d) A detailed analysis that sets forth the Root Cause and all contributing causes of that Flaring Incident, to the extent determinable;

(e) An analysis of the measures, if any, available to reduce the likelihood of a recurrence a Flaring Incident resulting from the same Root Cause or contributing causes in the future. If two or more reasonable alternatives exist to address the root cause, the

analysis shall discuss the alternatives that are available, the probable effectiveness and cost of the alternatives, and whether or not an outside consultant should be retained to assist in the analysis. Possible design, operational, and maintenance changes shall be evaluated. If Orion concludes that corrective action(s) is (are) required under Paragraph 15, the report shall include a description of the action(s) and, if not already completed, a schedule for its (their) implementation, including proposed commencement and completion dates. If Orion concludes that corrective action is not required under Paragraph 15, the report shall explain the basis for that conclusion;

(f) For AG Flaring Incidents and Tail Gas Incidents , a statement that:

(1) Specifically identifies each of the grounds for stipulated penalties in Paragraphs 20 and 21 of this Part and describes whether or not the Acid Gas Flaring Incident or Tail Gas Incident falls under any of those grounds; provided, however, that Orion may choose to submit with the Root Cause Failure Analysis a payment of stipulated penalties in the nature of settlement without the need to specifically identify the grounds for the penalty. Such payment of stipulated penalties shall not constitute an admission of liability, nor shall it raise any presumption whatsoever about the nature, existence or strength of Orion's potential defenses. Further, if Orion submits the Root Cause Failure Analysis with a payment of stipulated penalties in the nature of settlement, the incident for which the stipulated penalties are paid would be counted in the tally of flaring incidents under Paragraph 21 and Orion could not later assert that it should not be.

(2) Describes which paragraph 23(a) or (b) applies, and why, the Acid Gas Flaring Incident or Tail Gas Incident falls under Paragraph 23 of this Settlement;

(3) States whether or not Orion asserts a defense to the Acid Gas Flaring Incident or Tail Gas Incident and if so, a description of the defense if the subject incident falls under either Paragraph 21 or Paragraph 23(b); provided, however, that if Orion submits stipulated penalties in the nature of settlement as described in (f)(1) above, such defenses are moot and may be, but shall not be required to be, included in the incident investigation report.

(g) To the extent that investigations of the causes and/or possible corrective actions still are underway on the due date of the report, a statement of the anticipated date by which a follow-up report fully conforming to the requirements of Paragraph 13 will be submitted. However, if Orion has not submitted a report or a series of reports containing the information required to be submitted under this Paragraph within forty-five (45) days (or such additional time as the LDEQ may allow) after the due date for the initial report for the Acid Gas Flaring Incident or Tail Gas Incident the stipulated penalty provisions of Paragraphs 20 and 21 shall apply. Nothing in this Paragraph shall be deemed to excuse Orion from its investigation, reporting, and corrective action obligations under this Part that occurs after a subject Acid Gas Flaring Incident or Tail Gas Incident for which Orion has requested an extension of time under this Paragraph; and

(h) To the extent that completion of the implementation of corrective action(s), if any, is not finalized at the time of the submission of the report required under this

Paragraph, then, by no later than thirty (30) days after completion of the implementation of corrective action(s), Orion shall submit a report identifying the corrective action(s) taken and the dates of commencement and completion of implementation.

14. The reporting requirements set forth in this Part do not relieve Orion of its obligation to the LDEQ to submit any other reports or information required by the CAA, or by any other state, federal or local requirements.

I. Corrective Action

15. In response to any Acid Gas Flaring Incident Tail Gas Incident or HC Flaring Incident Orion, as expeditiously as practicable, shall take such interim and/or long-term corrective actions, if any, as are consistent with good engineering practice to minimize the likelihood of a recurrence of the Root Cause and all contributing causes of the subject incident.

16. If the LDEQ does not notify Orion in writing within thirty (30) days of receipt of the report(s) required by Paragraph 13 that it objects to one or more aspects of Orion's proposed corrective action(s), if any, and schedule(s) of implementation, if any, then that (those) action(s) and schedule(s) shall be deemed acceptable for purposes of Orion's compliance with Paragraph 15 of this Part.

17. The LDEQ does not, however, by its agreement to this Settlement or by its failure to object to any corrective action that Orion may take in the future, warrant or aver in any manner that any of Orion's corrective actions in the future will result in compliance with the provisions of the Clean Air Act, LEQA or its implementing regulations. Notwithstanding the LDEQ's review of any plans, reports, corrective

measures or procedures under this Section H, Orion shall remain solely responsible for compliance with the Clean Air Act and its implementing regulations.

18. If the LDEQ does object, in whole or in part, to Orion's proposed corrective action(s) and/or its schedule(s) of implementation, or, where applicable, to the absence of such proposal(s) and/or schedule(s), it shall notify Orion of that fact within thirty (30) days following receipt of the report(s) required by Paragraph 13 above.

19. Nothing in this Part shall be construed as a waiver of the LDEQ's rights under the Clean Air Act or LEQA and its regulations for future violations of the Clean Air Act or LEQA and its regulations nor to limit Orion's right to take such corrective actions as it deems necessary and appropriate immediately following a Flaring Incident or in the period during preparation and review of any reports required under this Part.

J. Acid Gas Flaring and Stipulated Penalties

20. Stipulated Penalties. The stipulated penalty provisions of Paragraph 29(a) shall apply to any Acid Gas Flaring Incident for which the Root Cause was one or more of the following acts, omissions, or events:

(a) Error resulting from careless operation by the personnel charged with the responsibility for the SRPs, TGUs, or Upstream Process Units;

(b) A failure of equipment that is due to a failure by Orion to operate and maintain that equipment in a manner consistent with good engineering practice; and/or

(c) failure to follow written procedures;

provided, however, that Orion may elect to submit stipulated penalties in the nature of settlement with no admission of liability as described in Paragraph 12(f)(1) of this Part with the submittal of the RCFA. Should Orion admit that the incident was the

result of one of previously listed acts, omissions, or events, and not elect to automatically submit stipulated penalties in the nature of settlement, then except for a Force Majeure event, Orion shall have no defenses to a demand for stipulated penalties for an Acid Gas Flaring Incident that falls under this Paragraph.

21. The stipulated penalty provisions of Paragraph 29, shall apply to any Acid Gas Flaring Incident that either:

(a) Results in emissions of sulfur dioxide at a rate of greater than twenty (20) pounds per hour continuously for three (3) consecutive hours or more; or

(b) Causes the total number of Acid Gas Flaring Incidents in a rolling twelve (12) month period to exceed five (5).

22. Defenses. In response to a demand by the LDEQ for stipulated penalties, Orion shall be entitled to assert a Malfunction defense with respect to any Acid Gas Flaring Incident falling under Paragraph 21. In the event that a dispute arising under Paragraph 20 is subjected to the Dispute Resolution provisions of this Settlement, nothing in this Paragraph is intended or shall be construed to deprive Orion of its view that Startup, Shutdown, and Malfunction defenses are available for Acid Gas Flaring Incidents, nor to deprive the LDEQ of its view that such defenses are not available. In the event that an Acid Gas Flaring Incident falls under both Paragraphs 20 and 21, then Paragraph 20 shall apply.

23. The stipulated penalty provisions of Paragraph 29 shall apply to Acid Gas Flaring Incidents other than those identified in Paragraphs 20 and 21 as follows:

(a) No stipulated penalties shall apply if the Root Cause is a First Time Occurrence of a Root Cause provided;

(1) If the Root Cause of the Acid Gas Flaring Incident was sudden, infrequent, and not reasonably preventable through the exercise of good engineering practice, then that cause shall be designated as an agreed-upon malfunction for purposes of reviewing subsequent Flaring Incidents;

(2) If the Root Cause of the Acid Gas Flaring Incident was not sudden and infrequent, and was reasonably preventable through the exercise of good engineering practice, then Orion shall implement corrective action(s) pursuant to Paragraph 15;

(b) Stipulated penalties shall apply if the Root Cause is a recurrence of the same Root Cause of a previous Acid Gas Flaring Incident that has occurred since the Effective Date of this Settlement, unless:

(1) the Acid Gas Flaring resulted from a Malfunction,

(2) the Root Cause previously was designated as an agreed-upon malfunction under Paragraph 23(a)(1), or

(3) the Acid Gas Flaring Incident was a recurrence of an event that Orion had previously developed a corrective action plan for and for which it had not yet completed implementation.

(c) In the event that a dispute arising under Paragraph 23(b) is subjected to the Dispute Resolution provisions of this Settlement, nothing in this Paragraph is intended or shall be construed to deprive Orion of its view that Startup, Shutdown, and Malfunction defenses are available for Acid Gas Flaring Incidents, nor to deprive the LDEQ of its view that such defenses are not available.

(d) If no Acid Gas Flaring Incident occurs at the refinery for a rolling thirty-six (36) month period following entry of this Settlement (other than as a result of a Malfunction or Force Majeure event), then the stipulated penalty provisions of Paragraph 29 no longer apply. The LDEQ may elect to reinstate the stipulated penalty provision if Orion has an AG Flaring or Tail Gas Incident that would otherwise be subject to stipulated penalties. The LDEQ's decision to reinstate the stipulated penalty provision shall not be subject to Dispute Resolution. Once reinstated, the stipulated penalty provision shall apply to future flaring incidents at the refinery and continue for the remaining life of this Settlement.

K. Miscellaneous

24. Calculation of the Quantity of Sulfur Dioxide Emissions resulting from Acid Gas or Hydrocarbon Flaring. The methodology outlined in this paragraph and paragraphs 25, 26, and 27 will be used for determining emissions of SO₂ resulting from Acid Gas Incidents, Tail Gas Incidents and Hydrocarbon Flaring Incidents. In the event Orion determines that a more accurate methodology exists for such calculations, Orion will notify the LDEQ prior to using the new methodology for purposes related to this Settlement.

For purposes of this Settlement, the quantity of SO₂ emissions resulting from Acid Gas or Hydrocarbon Flaring shall be calculated by the following formula:

$$\text{Tons of SO}_2 = [\text{FR}][\text{TD}][\text{ConcH}_2\text{S}][8.44 \text{ (at 60 degrees F)} \times 10^{-5}]$$

The quantity of SO₂ emitted shall be rounded to one decimal point. (Thus, for example, for a calculation that results in a number equal to 10.050

tons, the quantity of SO₂ emitted shall be rounded to 10.1 tons and 10.049 would be 10.0 tons.) For purposes of determining the occurrence of, or the total quantity of SO₂ emissions resulting from, an Acid Gas Flaring Incident that is comprised of intermittent Acid Gas Flaring, the quantity of SO₂ emitted shall be equal to the sum of the quantities of SO₂ flared during each such period of intermittent Acid Gas Flaring.

25. Calculation of the Rate of SO₂ Emissions during Acid Gas or Hydrocarbon Flaring. For purposes of this Settlement, the rate of SO₂ emissions resulting from AG or Hydrocarbon Flaring shall be expressed in terms of pounds per hour, and shall be calculated by the following formula:

$$ER = [FR][ConcH_2S][0.169].$$

The emission rate shall be rounded to one decimal point. (Thus, for example, for a calculation that results in an emission rate of 19.95 pounds of SO₂ per hour, the emission rate shall be rounded to 20.0 pounds of SO₂ per hour; for a calculation that results in an emission rate of 20.05 pounds of SO₂ per hour, the emission rate shall be rounded to 20.1 and 20.049 becomes 20.0 pounds.)

26. Meaning of Variables and Derivation of Multipliers used in the Equations in Paragraphs 24 and 25:

ER = Emission Rate in pounds of SO₂ per hour

FR = Average Flow Rate to Flaring Device(s) during Flaring, in standard cubic feet per hour

TD = Total Duration of Flaring in hours

ConcH₂S= Average Concentration of Hydrogen Sulfide in gas during Flaring (or immediately prior to Flaring if all gas is being flared) expressed as a volume fraction (scf H₂S scf gas)

$$8.44 \times 10^{-5} = [\text{lb mole H}_2\text{S} / 379 \text{ scf H}_2\text{S}][64 \text{ lbs SO}_2 / \text{lb mole H}_2\text{S}][\text{Ton}/2000 \text{ lbs}]$$

$$0.169 = [\text{lb mole H}_2\text{S}/379 \text{ scf H}_2\text{S}][1.0 \text{ lb mole SO}_2 / 1 \text{ lb mole H}_2\text{S}][64 \text{ lb SO}_2 / 1.0 \text{ lb mole SO}_2]$$

Standard conditions: 60 deg F, 14.7 lb-force/sq.in. absolute

The flow of gas to the Acid Gas or Hydrocarbon Flaring Device(s) (“FR”) shall be as measured by the relevant flow meter. Hydrogen sulfide concentration (“ConcH₂S”) shall be determined from the SRP feed gas analyzer. In the event that either of these data points is unavailable or inaccurate, the missing data point(s) shall be estimated according to best engineering judgment. The report required under Paragraph 13 shall include the data used in the calculation and an explanation of the basis for any estimates of missing data points.

27. Calculation of the Quantity of SO₂ Emissions resulting from a Tail Gas Incident. For the purposes of this Settlement, the quantity of SO₂ emissions resulting from a Tail Gas Incident shall be calculated by one of the following methods or an equivalent method approved by the LDEQ, based on the type of event:

(a) If the Tail Gas Incident is combusted in a flare, the SO₂ emissions are calculated using the methods outlined in Paragraph 24, or

(b) If the Tail Gas Incident is a event exceeding the 250 ppmvd adjusted to 0% O₂ (NSPS J limit), from a monitored SRP incinerator, then the following formula applies to

each 24-hour period of an incident beginning with the first hour that the rolling 12 hour average SO₂ concentration exceeds the 250 ppmvd Subpart J limit and ending with the 24-hour period in which the 250 ppmvd NSPS limit is last exceeded. Total SO₂ emissions during an incident are determined by summing the emissions during each 24-hour period of the incident:

$$ER_{TGI} = \sum_{i=1}^{H_{TGI}} [FR_{Inc.}]_i [Conc. SO_2 - 250]_i [(20.9 - \%O_2)/20.9]_i [0.169 \times 10^{-6}]$$

Where: ER_{TGI} = Excess Emissions from Tail Gas at the SRP incinerator, in SO₂ lbs. over a 24 hour period

$FR_{Inc.}$ = Incinerator Exhaust Gas Flow Rate (standard cubic feet per hour, dry basis) (actual stack monitor data or engineering estimate based on the acid gas feed rate to the SRP) for each hour of the incident.

Conc. SO₂ = Actual SO₂ concentration (CEM data) in the incinerator exhaust gas, ppmvd adjusted to 0% O₂ for each hour of the incident

% O₂ = O₂ concentration (CEM data) in % in the incinerator exhaust gas in ppm on dry basis for each hour of the incident.

$$0.169 \times 10^{-6} = [lb \text{ mole of } SO_2 / 379 SO_2] [64 \text{ lbs } SO_2 / lb \text{ mole } SO_2] [1 \times 10^{-6}]$$

H_{TGI} = Hours when the incinerator CEM was exceeding 250 ppmvd adjusted to 0% O₂ in each 24 hour period of the incident (as described above).

Standard conditions: 60 deg F, 14.7 lb-force/sq.in. absolute

In the event the SO₂ and/or the O₂ CEM hourly concentration data are inaccurate or not available or a flow meter for FR_{Inc}, does not exist or is inoperable, then estimates will be used based on best engineering judgment.

28. Reserved.

L. Stipulated Penalties under this Part

29. Nothing in this Part shall be understood to subject Orion to stipulated penalties for Hydrocarbon Flaring Incidents. Orion shall be liable for the following stipulated penalties for violations of the requirements of this Part. For each violation, the amounts identified below apply on the first day of violation through the end of the incident as explained below:

(a) Acid Gas Flaring, Tail Gas Incidents for which Orion is liable under this Part:

<u>Tons Emitted in Flaring Event</u>	<u>Total Duration of Flaring is 3 Hours or less</u>	<u>Total Duration of Flaring is Greater than 3 Hours but Less than 24 Hours</u>	<u>Total Duration of Flaring is Greater than 24 Hours</u>
<u>5 Tons or less</u>	\$500 per Ton	\$750 per Ton	\$1,000 per Ton
<u>Greater than 5 Tons but less than 15 Tons</u>	\$1,200 per Ton	\$1,800 per Ton	\$2,400 per Ton up to, but not exceeding, \$27,500 in any one calendar day
<u>Greater than 15 Tons</u>	\$1,800 per Ton, up to, but not exceeding, \$27,500 in any one calendar day	\$2,400 per Ton up to, but not exceeding, \$27,500 in one calendar day	\$27,500 per calendar day of the Incident

(b) For submitting a report that does not conform to the requirements of this Part after the deficiencies are pointed out and until corrected: \$5,000 per week, per report.

(c) Failure to timely submit any report required by this Part beginning on the 7th day past the report's due date: \$5,000 per week, per report.

(d) For those corrective action(s) which Orion is required to undertake following Dispute Resolution, then, from the 91st day after the LDEQ's receipt of Orion's report under Paragraph 13 of this Part until the date that either (i) a final agreement is reached between the LDEQ and Orion regarding the corrective action or (ii) a court order regarding the corrective action is entered: \$5,000 per month

(e) Failure to complete any corrective action under Paragraph 15 of this Part in accordance with the schedule for such corrective action agreed to by Orion or imposed on Orion pursuant to the Dispute Resolution provisions of this Settlement (with any such extensions thereto as to which the LDEQ and Orion may agree in writing). If Orion presents a reasonable basis for extension, the LDEQ shall not unreasonably withhold its consent or fail to respond timely to Orion's request: \$5,000 per week

VIII. Additional Program Enhancements

A. Air Program Enhancements

1. NOx Emissions Reductions From Orion's FCCU

Orion agrees to reduce NOx emissions from its FCCU. Orion will assess various options for reducing NOx emissions from its FCCU and commits to implement cost-efficient improvements to reduce NOx emissions from its FCCU at or before its 2008 scheduled turnaround.

Orion commits to study the use of SCR technology, SNCR technology and other NOx-reducing means or technology (e.g., NOx-reducing catalyst) on its FCCU, and to employ the means most appropriate, considering costs, to achieve the NOx emission reductions at or before its scheduled 2008 FCCU turnaround. Orion shall select NOx emission control technology that will achieve NOx emission limits of 20 ppmvd on a

365-day rolling average basis and 40 ppmvd on a 3-hour rolling average basis, each at 0% oxygen. Consistent with Part XI.B, Orion will seek an amendment or modification to its Part 70 Air Operating Permit to establish reduced enforceable emission limitations for NOx from its FCCU.

2. Installation of Ultra-Low NOx Burners on Heaters and Boilers

Orion installed new, or modified existing, heaters and boilers in constructing its facility pursuant to the Refinery's 1995 PSD permit. Low-NOx burners (0.08 lbs per mmBTU) were installed on certain heaters, and flue-gas recirculation systems were installed on two large boilers, both of which were intended to reduce NOx emissions and to ensure meeting existing BACT requirements. Orion calculated and reported to the LDEQ that it had achieved effective NOx reductions of over 1320 tons per year (or approximately 47 percent refinery wide and 64 percent of heaters and boilers) when compared to expected NOx emission levels from similar equipment not equipped to meet BACT. Additionally, Orion installed Belco Wet Gas Scrubber technology on its FCCU to reduce SO2 and PM emissions from the FCCU as part of its construction efforts pursuant to the 1995 PSD permit. That FCCU was installed to meet NSPS requirements for PM and SO2 emissions. The total cost of adding the above-described components to address NOx, SO2 and PM emissions exceeded \$20 million dollars.

(a) Orion agrees to further reduce NOx emissions by the installation of ultra-low NOx burners (0.04 lbs. per mmBTU) or equivalent NOx reduction technology on the following heaters and boilers on the following schedule:

On or before December 31, 2004:

Coker Heater F-53-1A
Coker Heater F-53-1B

Coker Heater F-53-1C
Coker Heater F-53-1D

At or before the Refinery's 2008 turnaround:

Boiler B-804
Boiler B-19-03
Boiler B-19-04
Vacuum Heater F-52-1B

(b) The following heaters are not currently in operation:

Crude Heater F-701
Crude Heater F-704
Vacuum Heater F-52-1A
DHT Heater 15-02

With respect to each of the above referenced heaters not currently in operation, Orion agrees to install ultra-low NOx burners (0.04 lbs. per mmBTU) or equivalent NOx reduction technology prior to restarting each such heater. For each of the above referenced heaters Orion does not restart before the end of 2008, then Orion shall seek to modify its Part 70 Air Operating Permit to reflect the elimination of that heater as a permitted source.

(c) Orion agrees to review the BACT status of its remaining heaters and boilers for which it contends BACT was properly assessed. To the extent that the LDEQ determines, after consultation with Orion, that BACT was not properly applied to any one or more of Crude Heater F-72-703; Boiler B 401C or Boiler B 401D, then Orion agrees to install ultra-low NOx burners (0.04 lbs. per mmBTU) or equivalent NOx reduction technology on the following heaters prior to each such heater beginning operation:

Low Sulfur Unit Heater 1
Low Sulfur Unit Heater 2
Low Sulfur Unit Heater 3.

(d) NOx reductions may be achieved by Orion on any of the above referenced heaters and boilers in lieu of the installation of ultra-low NOx burners (0.04 lbs. per mmBTU) or equivalent NOx reduction technology by Orion discontinuing use of any such heater or boiler identified above. In such circumstance, Orion shall seek to modify its Part 70 Air Operating Permit to reflect the elimination of that particular heater or boiler as a permitted source.

3. NSPS Subpart QQQ

NSPS Subpart QQQ design, record keeping and reporting requirements are not applicable to existing facilities at the Refinery that were not constructed, modified or reconstructed after May 4, 1987. Within one (1) year of the Effective Date of this Settlement, Orion agrees to conduct a third-party audit to evaluate compliance with NSPS Subpart QQQ. Where necessary, Orion agrees to correct any deficiencies in its NSPS Subpart QQQ program in accordance with a plan and schedule to be submitted to and approved by the LDEQ.

4. Continuous Emission Monitors (CEMs)

(a). Orion agrees to install CEMs for NOx and CO on existing heaters and boilers greater than 150 mmBTU/hour for which Orion installs ultra-low-NOx burners (0.04 lbs. per mmBTU/hour weighted average) pursuant to this Settlement. To the extent that two (2) or more heaters or boilers utilize a single stack and the combined rating for the heaters and boilers emitting through the single stack exceeds 150 mmBTU/hour, then a CEM shall be installed on that stack.

(b). Orion shall install, certify, calibrate, maintain, and operate all CEMs that would be required as a result of installation of new equipment required by this Settlement

in accordance with the requirements of 40 CFR § 60.11, 60.13 and Part 60 Appendices A, B and F. With respect to 40 CFR Part 60, Appendix F, in lieu of the requirements of 40 CFR Part 60 Appendix F § 5.1.1, 5.1.3 and 5.1.4, Orion shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") once every twelve (12) calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter. These CEMS will be used to demonstrate compliance with emission limits.

(c). Existing CEMS on Orion's FCCU, heaters, boilers, sulfur recovery units or other units affected by this Settlement currently comply with the certification, calibration, maintenance, and operation requirements of 40 CFR § 60.11 and 60.13 and Part 60 Appendices A, B and F. Orion shall continue to comply with these requirements. With respect to 40 CFR Part 60, Appendix F, in lieu of the requirements of 40 CFR Part 60 Appendix F § 5.1.1, 5.1.3 and 5.1.4, Orion may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) once every twelve (12) calendar quarters, provided that a Cylinder Gas Audit is conducted each calendar quarter. These CEMS will be used to demonstrate compliance with emission limits.

5. Coker Wet Gas Compressor Reliability Improvements.

Orion commits to make physical modifications to the Interstage drum and to the controls associated with the Coker Wet Gas compressor. These modifications are not required by any law or regulation. This project is estimated to cost approximately \$1,000,000 and will be completed during or before the turnaround scheduled for 2003. This project will result in improved overall system reliability resulting in a reduction of flaring events.

6. Naptha Hydrotreater Charge Heater Testing

Orion agrees to emission compliance test the Naptha Hydrotreater Charge Heater by no later than June 30, 2004.

B. Miscellaneous Program Enhancements

1. Environmental Management Systems.

Orion is currently ISO 14001 certified. Certification involves an annual review and evaluation of the environmental management system by a qualified independent auditor. Orion agrees to maintain its annual certification for each annual period for the term of this Settlement.

2. Waste Housekeeping Issues.

Orion agrees to clean up all spills, drips, and releases from equipment immediately or as soon as practicable after detection, and ensure that the contaminated materials are handled according to applicable regulations.

3. Lab Waste Container Modifications.

Orion agrees to upgrade its Lab Waste Container to close all vents or to route the vents to an approved control device so as to eliminate the release of VOCs to the atmosphere. Orion agrees to submit to the LDEQ a report within ninety (90) days following the Effective Date of this Settlement identifying the changes it determines it will take along with a schedule for implementing the changes. The LDEQ agrees to expeditiously act upon any permit application that may be necessitated by Orion's implementation of this task.

4. Crude Unit No. 1 Inventory Elimination.

Orion agrees to identify and remove any inventory remaining in Crude Unit No. 1 within one (1) year of the effective date of this Settlement.

5. Environmental Awareness Training.

Orion currently conducts an annual training program for operations personnel, which includes environmental regulation awareness. Orion agrees to continue this program for operational personnel for the term of this Settlement.

6. LPDES Quality Assurance Plan

Within ninety (90) days of the Effective Date of this Settlement, Orion shall submit to the LDEQ for review and approval an LPDES Quality Assurance Plan ("QAP") with respect to Orion's LPDES Permit No. LA0052051. At a minimum, the QAP will describe the location that each outfall will be sampled, the frequency of sampling, the method of sampling and the procedure for preparing chain-of-custody documentation for each sample collected. In addition, the QAP will include a schedule for training employees tasked to conduct sampling activities under this plan.

Orion further agrees to submit annually, on March 31 of each year during the term of this Settlement for the preceding calendar year, a report certifying compliance with the terms of Orion's LPDES Permit No. LA0052051. The report shall be certified by a refinery manager or company official responsible for environmental management and compliance using the language contained in Part X. D of this Settlement.

7. Compliance Documentation and Environmental Information Management Software Installation

Orion commits to review compliance documentation software and information management software and to install selected software on appropriate computers at the refinery. The information management software will be designed to provide

environmental personnel with quick and easy access to refinery operating data and to enable them to more efficiently summarize the data into report form. Orion expects the software to increase data accuracy and reporting efficiency so as to eliminate reporting errors. The Compliance Documentation software will be designed to better assure that day-to-day activities required as part of the applicable regulations are timely completed and documented. This system will assign responsibility for specific environmental tasks to individuals and will document the completion of each task. These two systems will improve the level of compliance at the facility by improving the efficiency of, and otherwise enhancing, Orion's Environmental Management System. These systems are expected to cost approximately \$200,000 and are expected to be implemented within 24 months of the effective date of this Settlement.

IX. Beneficial Environmental Projects (BEPs)

Additionally, to resolve the claims set forth in this Settlement, Orion agrees to the expenditure of Two Million Dollars (\$2,000,000.00) to perform Beneficial Environmental Projects ("BEPs"), as described below:

A. Community-Wide Programs: One Million Dollars (\$1,000,000) over four (4) years

Orion commits to spend the sum of one million dollars (\$1,000,000) at the rate of two hundred fifty thousand dollars (\$250,000) annually for the four years following the effective date of this Settlement on community-wide projects. Orion will first obtain the concurrence of the LDEQ with respect to each project and the general amount of expenditure per project. These projects may include, but are not limited to the following:

1. Ambient Air Monitoring, in conjunction with the on-going program agreed to between the LDEQ and Motiva in the Norco-New Sarpy area.

2. Early Alert System: Enhancement to warning system in conjunction with St. Charles Parish to better alert the fence line community in the event of any reportable releases from the facility.

3. An enlargement and beautification of buffer zone between Orion and the east fence line community.

4. Cooperative arrangement with St. Charles Parish for quality of life projects.

B. Wastewater Treatment Unit Enhancements: One Million Dollars (\$1,000,000).

Orion currently utilizes one or more oil-water separators as pollution control devices employed to meet effluent discharge requirements. Those devices currently operate to remove oil sufficiently to meet current LPDES permit requirements. Orion agrees to conduct an engineering study to evaluate improvements, replacements and/or additions to its oil-water separators, beyond that which is required to properly operate and maintain its current equipment, and to make such appropriate improvements within 36 months of the Effective Date. The purpose of the study is to determine the best method to reduce oil concentrations at the wastewater treatment unit (WWTU) in order to improve or enhance WWTU efficiency, to improve the quality of the wastewater effluent, and to further reduce the potential for odors associated with the biological treatment in the WWTU process. Potential recommendations from the study may include, but are not limited to, a new dissolved gas floatation (DGF) unit, improvements in the oil removing efficiency of the existing API separator, or other separator technology. Where existing facilities have been installed, and to the extent that they are used as part of Orion's waste water system, Orion shall continue to maintain such equipment in proper working order and comply with the applicable provisions of LAC 33:III.905 regarding control of

emissions. At its option, Orion may elect to replace and/or retrofit one or more of its existing oil-water separators, provided the replacement unit is more efficient than the unit being replaced, during the 36-month time frame. Estimated project costs for the evaluation and anticipated improvements are one million dollars (\$1,000,000).

C. Reporting on BEPs

Orion will provide semi-annual reports sufficient to establish compliance with the timelines or levels of expenditures on the Beneficial Environmental Projects identified in this Part IX. Each semi-annual report shall be postmarked not later than 30 days following the end of each semi-annual period. The semi-annual reporting period shall encompass the period January 1 through June 30, and July 1 through December 31. The first compliance report shall be due within 30 days after the end of the semi-annual period after the Effective Date of this Settlement. The final compliance report shall be due within 30 days after the semi-annual period following completion of the projects identified, above.

D. Adjustments to BEP Financial Commitments

Orion commits to spend a total of two million dollars (\$2,000,000) on the above-referenced BEPs. In establishing compliance with the terms of this Settlement, the LDEQ will consider the total amount of Orion's expenditures on the above-referenced BEPs. In the event Orion's expenditures on any of the above-referenced BEPs are less than the amount set forth above, the LDEQ will consider any cost overrun on any other BEP as an offset against the shortfall. In the event of a shortfall in total expenditures, Orion will propose for the LDEQ's consideration and perform one or more additional BEPs, which must meet the LDEQ approval, to satisfy the shortfall and spend the full

BEP commitment of \$2,000,000. If the additional proposed BEP(s) are not approved by the LDEQ, then the LDEQ may require the balance due as a cash payment, or require additional specified BEPs, at its option.

X. General Recordkeeping, Record Retention and Reporting

A. Orion shall retain all records required to be maintained in accordance with this Settlement for a period of five (5) years after termination of the Settlement, unless other regulations require the records to be maintained longer.

B. All notices, reports or any other submissions required of Orion to be certified, with the exception of the Quarterly Progress Reports, shall contain the following certification. They may be signed by the refinery manager or his/her designee, as provided in writing by the refinery manager, provided the designee is a company employee responsible for environmental management and compliance.

“I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

C. Beginning with the first full calendar quarter after the Effective Date of this Settlement, Orion shall submit a calendar Quarterly Progress Report (“calendar quarterly report”) to the LDEQ within thirty (30) days after the end of each calendar quarter during the term of this Settlement. In addition to any other information specifically required to be submitted per other parts of this Settlement, this report shall contain the following:

- (a) progress report on the implementation of the requirements of Parts V - VIII of this Settlement;
- (b) a summary of all Hydrocarbon Flaring Incidents;
- (c) a description of any problems anticipated with respect to meeting the Compliance Programs of Parts V - VI of this Settlement.

D. The calendar Quarterly Progress Reports shall be certified by a refinery manager or company official responsible for environmental management and compliance at the refinery, as follows:

“I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.”

XI Permit Emission Limit Changes

A. SO₂ Emission Limits on FCCU

Orion agrees to meet SO₂ emission limits of 25 ppmvd at 0% oxygen on a 365-day rolling average limit on its FCCU within one (1) year of the Effective Date of this Settlement. Orion also agrees to meet SO₂ emission limits of 50 ppmvd at 0% oxygen on a 7-day rolling average on the FCCU on the Effective Date of this Settlement. The LDEQ agrees to timely address any air permit modifications necessary to implement this provision.

B. NO_x Emission Limits on FCCU

Orion has agreed in Part VIII.A.1 of this Settlement to make improvements to its FCCU to reduce NOx emissions from its FCCU at or before Orion's 2008 turnaround. Orion shall meet NOx emission limits of 20 ppmvd on a 365-day rolling average basis and 40 ppmvd on a 3-hour rolling average basis, each at 0% oxygen, from its FCCU by December 31, 2009. The LDEQ agrees to timely address any air permit modifications necessary to implement this provision.

C. CO Emission Limit Changes

Orion agrees to meet CO emission limits on its FCCU of 100 ppmvd at 0% oxygen on a 365-day rolling average basis by no later than December 31, 2009.

XII. Effect of Settlement

A. This Settlement is intended to constitute a compromise and settlement, without any admission of or acknowledgment by Orion that it is liable for any violations, and is being executed in the interest of settling the state's claims and avoiding for both parties the expense and effort in litigation or an adjudicatory hearing. In agreeing to the compromise and settlement, the LDEQ considered the factors for issuing civil penalties set forth in La. R. S. 30:2025(E) of the LEQA and in La. Adm. Code 33:I.Chapter 7, as well as the rules relating to beneficial environmental projects set forth in LAC 33:1, Chapter 25.

B. In consideration of the above, any and all alleged violations or issues of alleged non-compliance raised, or which could have been raised, by the LDEQ in the following Compliance Orders/ Notices of Potential Penalty, including any order or penalty which the LDEQ considered or could have considered with regard to any alleged violation or non-compliance by Orion thereof, and including matters or potential

violations self-disclosed by Orion by submissions to the LDEQ dated up to and including June 28, 2002, are fully compromised and settled:

- 1) Enforcement Tracking No. AE-CN-01-0191 (August 8, 2001)
- 2) Enforcement Tracking No. MM-CN-01-0054 (March 19, 2002)
- 3) Enforcement Tracking No. MM-CN-02-0029 (August 29, 2002).

C. The LDEQ acknowledges that it considered the allegations made in a Notice and Finding of Violation (NOV) issued by EPA, dated July 23, 2002, in agreeing to enter into this Settlement.

D. Denial of Liability by Orion

Orion expressly denies that it is liable for any violations under the federal Clean Air Act, LEQA or any regulations promulgated thereto.

E. Additional Effects of Settlement

This Settlement constitutes a full settlement of and shall resolve all civil liability of Orion to the State of Louisiana for any alleged violations by Orion occurring prior to the Effective Date of this Settlement under the following programs under the federal Clean Air Act, the Louisiana Environmental Quality Act, and regulations promulgated thereto:

1. Prevention of Significant Deterioration ("PSD"): for any increase in SO₂, NO_x and CO emissions resulting from Orion's construction, modification, or operation of the Refinery's fired air emission sources, including its FCCU; all heaters and boilers; flares; and SRPs.

2. New Source Performance Standards ("NSPS"), Subpart J: for any fuel gas combustion devices (including Orion's flares); all heaters and boilers; the FCCU; and SRPs.

3. NSPS Subpart A and J Releases: Orion's notification of compliance with NSPS Subpart A and J with respect to its flares constitutes full settlement of and shall resolve all past civil liability of Orion for the flares through the date of the demonstration or certified compliance.

4. Benzene Waste and LDAR Releases: for all events that may have occurred prior to the Effective Date of this Settlement under the following programs: LDAR, 40 CFR Part 60, Subparts VV and GGG, and 40 CFR Part 63, Subparts F, H, and CC, and applicable Louisiana provisions; Benzene NESHAP, 40 CFR Part 61, Subparts FF, J and V, and applicable Louisiana provisions. This Settlement also covers events that continue past the Effective Date, provided those events were identified in or prior to the submittal of the initial Third Party LDAR Audit conducted pursuant to Part VI or the BWON Compliance Verification Review conducted pursuant to Part V, and these events are addressed as appropriate per this Settlement.

F. Orion agrees that the LDEQ may consider the inspection report(s), the Compliance Orders/Notices of Potential Penalty, and this Settlement for the purpose of determining compliance history in connection with any future enforcement or permitting action by the LDEQ against Orion, and in any such action Orion shall be estopped from objecting to the above-referenced documents being considered as proving the violations alleged therein for the sole purpose of determining Orion's compliance history in any such permitting or enforcement action.

G. This Settlement shall be considered a final order of the secretary for all purposes, including, but not limited to, enforcement under La. R.S. 30:2025(G)(2), and Orion hereby waives any right to administrative or judicial review of the terms of this Settlement. Orion expressly reserves, however, the right to administrative or judicial review of the actions of the LDEQ acting upon, interpreting and/or applying the terms of this Settlement, including in accordance with the terms of the Dispute Resolution provisions of this Settlement.

XIII. Publication of Settlement

Orion has caused a public notice advertisement to be placed in the official journal of the parish governing authority in St. Charles Parish as well as a newspaper of general circulation in that parish. The advertisement, in form, wording and size approved by the LDEQ, announced the availability of this settlement for the public view and comment and the opportunity for a public hearing. Orion has submitted a proof-of-publication affidavit to the LDEQ and, as of the date this Settlement is executed on behalf of the LDEQ, more than forty-five (45) days have elapsed since publication of the notice.

XIV. Force Majeure

If any event including, but not limited to construction delays, one or more union strikes at Orion's facility, preparation for union strikes, acts of terrorism and/or an act of declared or undeclared war, occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Settlement, and which otherwise meets the requirements of this Part, Orion shall notify the LDEQ in writing as soon as practicable, but in any event within twenty (20) business days of when Orion first knew of the event or should have known of the event by the exercise of due diligence. In this

notice, Orion shall specifically reference this Part of this Settlement and describe the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by Orion to prevent or minimize the delay and the schedule by which those measures will be implemented. Orion shall adopt all reasonable measures to avoid or minimize such delays. The LDEQ shall notify Orion in writing regarding the claim of a delay or impediment to performance within thirty (30) business days of receipt of the Force Majeure notice.

If the LDEQ agrees that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Orion, including any entity controlled by them, and that they could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances, or such other period as may be appropriate in light of the circumstances. Such stipulation may be made a modification to this Settlement by agreement of the parties pursuant to the modification procedures established in this Settlement. Orion shall not be liable for stipulated penalties for the period of any such delay.

If the LDEQ does not accept Orion's claim of a delay or impediment to performance, Orion may invoke the Dispute Resolution provisions of this Settlement. If it is ultimately determined that the delay or impediment to performance has been or will be caused by circumstances beyond the control of Orion, including any entity controlled by them, and that they could not have prevented the delay by the exercise of due diligence, Orion shall be excused as to that event(s) and delay (including stipulated

penalties), for all requirements affected by the delay for a period of time equivalent to the delay caused by such circumstances or such other period as may be determined.

Orion shall bear the burden of proving that any delay of any requirement(s) of this Settlement was caused by or will be caused by circumstances beyond its control, including any entity controlled by them, and that they could not have prevented the delay by the exercise of due diligence. Orion shall also bear the burden of proving the duration and extent of any delay(s) attributable to such circumstances. An extension of one compliance date based on a particular event may, but does not necessarily, result in an extension of a subsequent compliance date or dates.

Unanticipated or increased costs or expenses associated with the performance of Orion's obligations under this Settlement and changed financial circumstances shall not, in any event, constitute circumstances beyond their control, or serve as a basis for an extension of time under this Part.

XV. Dispute Resolution

A. The dispute resolution procedures provided herein shall be available to resolve only those disputes involving ten thousand dollars (\$10,000) or greater. These procedures shall be invoked by the notification by one party to the other party hereto in writing advising of a dispute. The notice shall describe the nature of the dispute and shall describe the party's position with regard to the dispute. Upon receipt of the notification of dispute, the other party shall acknowledge receipt and shall expeditiously schedule a meeting to discuss the dispute informally not later than fourteen (14) days after receipt of such notice.

B. Disputes submitted to dispute resolution shall, in the first instance, be subject to informal negotiations between the Parties. Such period of informal negotiation shall not exceed twenty (20) calendar days from the date of the first meeting of the Parties, unless it is agreed that this period should be extended, and then shall be extended only one additional twenty (20) day period.

C. In the event the Parties are unable to reach agreement during the informal negotiation period, the LDEQ shall, within thirty (30) days of the end of the informal negotiation period, provide Orion with a written summary of its position regarding the dispute. This position shall be considered binding unless, within fifteen (15) days of receipt of the written summary, Orion requests in writing that the LDEQ approve an independent third party contractor or expert, to be paid for by Orion, which will review, analyze and advise the Parties in writing regarding the matter under dispute resolution. Not later than thirty (30) days from receipt of the expert's report, the Assistant Secretary of the Office of Environmental Compliance at the LDEQ will inform Orion of the LDEQ's final position which shall be considered binding on Orion unless, within fifteen (15) days of receipt of the LDEQ's final position, Orion files with the Clerk of the 19th Judicial District Court for East Baton Rouge Parish an appeal or other relief as the District Court deems appropriate.

D. Nothing herein shall preclude Orion from paying any assessed stipulated penalties under protest. In the event the stipulated penalties are paid by Orion under protest, Orion shall deposit such stipulated penalties in an interest bearing account controlled by Orion which is created specifically for that purpose. If all or a portion of those penalties are later determined as a result of the invocation of these procedures not

to be due or owed, then Orion shall be allowed to reclaim such penalties, including any interest earned, and remit to the LDEQ, pursuant to the payment provision of this Settlement, any amounts determined to be due and owing, including interest earned on such amounts.

E. As part of any resolution of any dispute, the Parties, by agreement, may extend or modify any deadline established by this Order.

XVI. Judicial Confirmation of Settlement; Retention of Jurisdiction

After signature by the LDEQ of this Settlement, Orion and the LDEQ may jointly file, in a Louisiana District Court with proper jurisdiction and venue, a Joint Motion for Entry of a Consent Judgment to convert this Settlement to an Order of the District Court.

In the event this Settlement is converted to an Consent Judgment by Order of the District Court, the District Court shall retain jurisdiction over both the subject matter and the Parties to this Settlement for the duration of the performance of the terms and conditions of this Settlement for the purpose of enabling the Parties to apply to the Court for such further order, direction, and relief as may be necessary or appropriate for the construction or modification of this Settlement, or to effectuate or enforce compliance with its terms, or to resolve disputes in accordance with Part XV (Dispute Resolution).

XVII. General Provisions

A. **Effective date:** This Settlement, and the agreements contained herein, shall become final and effective as of the date the Louisiana District Court with proper jurisdiction and venue issues an Order entering this Settlement as a Consent Judgment, pursuant to Part XVI, above. If the Parties jointly agree to waive the provisions of Part XVI, above, then the Effective Date of this Settlement shall be the latter of the date

LDEQ provides Orion with written notice of the signature of this Settlement by the LDEQ or the Parties' joint written consent to waive the provisions of Part XVI, above.

B. Public Comment and Entry: The Parties agree and acknowledge that final approval by the LDEQ (and execution of this Settlement) is subject to the requirements of La. R.S. 30:2050.7, which provides for public notice of this Settlement in newspapers of general circulation, and opportunity for public comment, consideration of any comments, and concurrence by the State Attorney General.

C. Failure of Compliance: The State of Louisiana, through the LDEQ, by its consent to this Settlement, in no manner warrants or avers that Orion's complete compliance with this Settlement will result in compliance with the provisions of the Clean Air Act, 42 U.S.C. 7401, *et seq.*, the Louisiana Environmental Quality Act, La. R.S. 30:2001, *et seq.*, or any other federal, state or permitting requirements. Notwithstanding the LDEQ's review or approval of any plans, reports, policies, or procedures formulated pursuant to this Settlement, Orion shall remain solely responsible for any non-compliance with the terms of this Settlement, all applicable permits, the Clean Air Act and regulations promulgated thereunder, or any other relevant federal or state regulations. The pendency or outcome of any proceeding concerning issuance, reissuance, or modification of any permit shall neither affect nor postpone Orion's duties and obligations as set forth in this Settlement.

D. Termination: This Settlement (and any Consent Judgment entered pursuant to Part XVI, above) shall be subject to termination by written notice by the LDEQ (or by motion of the State of Louisiana, if of a Consent Judgment) or by Orion after Orion satisfies all requirements of the Settlement. The requirements for termination

include payment of all stipulated penalties that may be due to the LDEQ under this Settlement, installation of control technology systems, and the performance of all other Settlement requirements, including the completion of Beneficial Environmental Projects described herein. If Orion believes it is in compliance with the requirements of this Settlement and has completed all tasks herein, then it shall so certify to the LDEQ, and unless the LDEQ objects in writing within thirty (30) days of receipt of the certification, the this Settlement be deemed terminated (or if of a Consent Judgment, upon the District Court granting ex parte Orion's motion). If the LDEQ objects to Orion's certification within the thirty (30) days allotted, then the Parties agree to engage in Dispute Resolution proceedings, or to submit the dispute directly to a Louisiana District Court with proper jurisdiction and venue for determination on an expedited basis.

E. Notice

Unless otherwise provided herein, notifications to or communications with the LDEQ or Orion shall be deemed submitted on the date they are postmarked and sent either by overnight express courier or by certified or registered mail, return receipt requested. Upon request by or the prior consent of the intended recipient, notice and/or copies may be sent via electronic mail. Except as otherwise provided herein, when written notification or communication is required by this Settlement, it shall be addressed as follows:

As to the LDEQ:

Peggy M. Hatch
Administrator
Enforcement Division
Office of Environmental Compliance
P.O. Box 82215
Baton Rouge, Louisiana 70884-2215

As to Orion:

Eric E. Bluth
Refinery Manager
Orion Refining Corporation
P.O. Box 537
Norco, Louisiana 70079

Any party may change either the notice recipient or the address for providing notice to it by serving the other party with a notice setting forth such new notice recipient or address.

F. Modification

This Settlement may be modified by the written approval of both the LDEQ and Orion (or, if a Consent Judgment, by order of the District Court). Furthermore, the LDEQ may allow extensions of compliance dates and deadlines upon a written and substantial showing by Orion of good cause that such a delay is necessary. Additionally, it is anticipated that the Parties may reduce the frequency and nature of reporting over time.

G. Severability

The provisions of this Settlement are severable. In the event any section, paragraph, clause, provision or condition of this Settlement is declared unenforceable, all other sections, paragraphs, clauses, provisions or other conditions not affected shall remain in force and effect.

H. Costs

The LDEQ and Orion shall each bear their own costs and attorney's fees.

I. Entire Agreement; Authorization

This Settlement constitutes the entire agreement and settlement between the Parties. Prior drafts shall not be used in any action involving interpretation or enforcement of this Settlement.

The undersigned representative of each party to this Settlement certifies that he or she is duly authorized by the party whom he or she represents to enter into the terms and bind that party to them.

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
Hall Bohlinger, Secretary

WITNESSES:

BY: _____

R. Bruce Hammatt
Assistant Secretary
Office of Environmental Compliance

DATE: _____

Notary Public

APPROVED BY:


R. Bruce Hammatt
Assistant Secretary

ORION REFINING CORPORATION

WITNESS:

BY: _____

NAME: _____

TITLE: _____

DATE: _____

Notary Public